DOCUMENT RESUME

ED 278 799 CE 046 272

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|---|---|
| TITLE | Case Studies in Technology-Oriented Job Preparation. Final Report. |
| INSTITUTION | One America, Inc., Washington, D.C. |
| SPONS AGENCY | Office of Vocational and Adult Education (ED), Washington, DC. |
| PUB DATE | 86 |
| CONTRACT | 300-86-0009 |
| NOTE | 49p. |
| PUB TYPE | Reports - Research/Technical (143) |
| EDRS PRICE | MF01/PC02 Plus Postage. |
| DESCRIPTORS | Articulation (Education); Associate Degrees; Case Studies; *Community Colleges; Degree Requirements; *Electronics; Higher Education; Integrated Curriculum; *Job Training; Models; Outreach Programs; *Program Content; Program Development; Student Characteristics; Teacher Characteristics; *Technical Education; *Technological Literacy; Two Year Colleges; Vocational Education |
| IDENTIFIERS | Charles County Community College MD; Northern Virginia Community College; Prince Georges Community College MD; University of the District of Columbia |

ABSTRACT

Case studies were made of the technology-oriented electronics-related degree programs at four community colleges. The programs examined are located at the following institutions: Charles County Community College, Northern Virginia Community College, Prince Georges Community College, and the University of the District of Columbia. The four programs were found to be highly successful in meeting local community education and job training needs. One major need, however, was that of mechanisms to support information sharing on a regular basis among vocational-technical educators at community colleges. Although program administrators and instuctors attend periodic meetings with their colleagues, these settings do not provide for consistent updating of specific program activities or instructional techniques. A widely circulated newsletter featuring successful program components could be helpful in this context. Enrolling increased numbers of students in technology-oriented programs is another area in need of improvement. Despite existing outreach and articulation activities with secondary schools, other colleges, universities, and local businesses at each of the four schools, the students interviewed indicated that their enrollment decisions were influenced most by friends and family. Special efforts to recruit and retain minority youth are particularly needed. (Appendixes to this report include a study abstract, the revised study plan, and program and institutional profile charts.) (MN)

# FINAL REPORT

# CASE STUDIES IN

# TECHNOLOGY-ORIENTED JOB PREPARATION

CONTRACT NUMBER: 300860009

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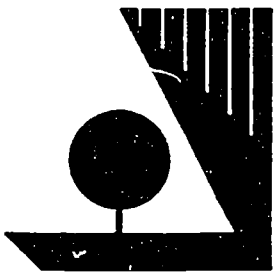

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FINAL REPORT
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PREFACE

One America, Inc., was pleased to conduct electronics technology program case studies involving four local community colleges. This activity was implemented as a second phase to an extensive literature review of technology-oriented job preparation programs, in which the available published data did not provide detailed documentation on individual program planning and implementation.

The case studies served as an opportunity to both obtain indepth information and to observe the dynamics that characterize specific programs. We thank the many individuals who contributed to this effort: our project officer, panel of experts, program administrators, instructors and students.

This report is specifically dedicated to the many instructors whose classes we observed. These individuals demonstrated an infallible formula for success: competence, commitment and creativity. Such attributes are rarely discussed in the identification of critical program components. Yet is is these human intangibles that best prepare us to meet the technological challenges of tomorrow.

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BACKGROUND

The magnitude and speed of technological changes in our society have provoked a great deal of speculation about the future availability, location and nature of jobs. Accordingly, the U.S. Department of Education, Office of Vocational and Adult Education (OVAE) sponsored a study to determine activities undertaken by education institutions in response to a changing marketplace. One America, Inc. was contracted to perform a short-term study to:

- identify all documented current information on the state of technology oriented vocational educational programs;
- analyze the literature to discern the roles of the principle players, the links between programs and government bodies and private sector entities, and the character of the programs; and
- provide vocational education professionals, corporations, labor unions, professional associations, government officials at all levels, students, and the general public with a portrait of the state-of-the-art as well as a detailed picture of programs which could serve as models or guides for those wishing to embark on technology-oriented training.

This literature review culminated in a final report that discussed in detail:

- The universe of technology, including terminology, areas of uncertainty, and expectations.
- Institutional actors, including Federal, state, and local government agencies, public education institutions, private education institutions, employers, labor unions, associations, professional organizations and the media.
- Methodology, including primary automated data sources utilized, standard data forms developed, and categorization schemes generated.
- Overview of vocational education approaches, including general models, traditional school/business cooperative relationships, statewide plans, accountability reports and JTPA trends.
- Program characteristics, including identified programs, program locations by state and educational institution, types of training, prime movers and groups served.
- Conclusions and recommendations summarizing the state-of-the-art.

PURPOSE

The study's primary recommendation addressed the additional data needs required to describe individual program development and implementation from which model approaches could be identified. One America proposed to conduct case studies on local programs and practices being utilized to prepare vocational education students for entry into technology oriented jobs in three community college settings and a comprehensive land grant institution providing a full range of services. Schools selected by the U.S. Department of Education included:

- Northern Virginia Community College;
- Prince Georges (MD) Community College;
- Charles County (MD) Community College; and
- The University of the District of Columbia.

The overriding goals of this activity include:

- To design and complete case studies of programs and practices being used or planned to prepare post-secondary and adult vocational education students for entry into technology-oriented occupations in four specific community colleges.
- To offer technical assistance to the four community colleges in preparing to serve or serving youth and adults needing technology-oriented job training.
- To recommend strategies which community colleges can use in addressing the needs in preparing vocational education students for entry into technology-oriented occupations.

Following development of the Project Management Plan, a Project Abstract (Appendix A) was prepared for use in acquainting the vocational education community with the project's purpose, objectives and major activities.

METHODOLOGY

A case study plan was developed with the assistance of a six (6) member panel of experts (POE). POE members included Directors of Vocational Education at the four community colleges, the Maryland State Director of Vocational Education and a representative from the American Association of Community and Junior Colleges (AACJC).

Project staff met with this group to discuss the parameters of the project and to review a draft study plan. Electronics technology degree programs were recommended as the overall focus for the case studies. Each community college representative commented on the wide range of possible technology-oriented programs available at each school. A broader case study approach was not possible within the required time and logistical constraints.

It was agreed that data would be collected that centered on five major themes, including how electronics technology programs are:

- o initially conceived
- o integrated into the curriculum
- o staffed and equipped
- o organized and taught and,
- o evaluated and changed over time.

POE members were additionally required to provide introductions to appropriate program administrators with whom initial interviews would be scheduled. Following this meeting, the draft study plan was revised to reflect POE comments and mailed to POE members. (Appendix B).

Project staff then met with Electronics Technology Program representatives to review major study questions and select available courses for on-site review. In each case, attempts were made to visit two first year and two second year laboratory settings. At Northern Virginia Community College, visits to both campuses that offer the program were scheduled.

Informal meetings were held with lab instructors prior to regular lab sessions. Instructors explained the general lab assignment and project staff were encouraged to examine equipment, observe student activities, and ask questions. Following each lab, project staff either met briefly with or obtained telephone numbers from a minimum of two students who volunteered to be interviewed further. Questions asked of students included the following:

- How did you hear about this degree program?
- Do you think that this program fulfills its stated goals?
- Are you satisfied with the kind of instruction?
- What kind of assistance or information is available to you in seeking a job?
- Do you have any suggestions about how the program can be improved?

PROGRAM ORIGINS

The origins of the electronics-related degree programs at the four institutions covered in this study shed light on a number of important issues. Four in particular stand out:

1. The conceptual framework from which technical educations have developed.
2. The degree to which programs are responsive to the very specific conditions and demands of a geographical area.
3. The relationship between a program and an emerging technology.
4. The special place and function of the community college in the entire spectrum of public educational institutions.

The subject of program origins at community colleges can be elusive if interesting planning steps are undocumented or if the leading actors are no longer at the institution.

Fortunately, the present study is not beset by such difficulties. On the contrary, there has been a remarkable continuity in the faculties of the four institutions, and, in the case of the Maryland Community College, there is an unusually rich written record consisting of:

- a comprehensive study of ECONOMIC DEVELOPMENT THROUGH EDUCATION AT MARYLAND'S COMMUNITY COLLEGES, undertaken for the Maryland State Board of Community Colleges and completed in August 1985, and
- a program proposal submitted by Charles County Community College to the State of Maryland regarding an electronics technology AA degree program implemented in the fall of 1985.

The first document offers a fully articulated view of current thought, and, by inference, a partial view of the educational philosphy and practice in the past; the second, a rare view of exactly how a new program was planned and came into being.

The main purpose of the ECONOMIC DEVELOPMENT THROUGH EDUCATION AT MARYLAND'S COMMUNITY COLLEGES was to identify the role of the state's seventeen community colleges in developing Maryland's economic resources, to recommend how these institutions could improve the ways they support local economies, and to inform educators of the economic development activities of community colleges in other states.

The primary method of data collection for this study was a survey conducted with the assistance of the Maryland Community College Economic Development Coordinators, a newly formed group of college personnel responsible for business and industry services. The very existence of such a group is striking evidence of the close link between the current role of community colleges and the economic development plans of the counties and states where they are located. From its origins, of course, the mission of the community college was to serve the local community. But this document shows, and all other evidence supports, that today's programs are both carefully conceived and extensively reviewed in the context of economic planning and a detailed understanding of local demand and opportunity.

The full details of how the year-old electronics technology program at Charles County Community College came into being can be found in the Instructional Program Proposal required of all Maryland community colleges recommending a new program. Here, we present an outline of the salient issues covered in this document.

Background: In the past, Charles County Community College offered an electronics technology program. This program, which was rigid in structure and thus unable to meet the needs of the community, was discontinued following low enrollment. When it became apparent that a new program was desirable, its principle initiator, Mr. Herbert J. Burrows, Chairman Math, Engineering, Chemistry, and Physics, was especially interested in developing a flexible program truly responsive to the varying needs of its potential students. Dr. Burrows and his colleagues conceptualized a program that would attract and address the needs of students with no prior training as well as those with some experience in the field. The program was designed to offer a Certificate Program with three options:

1. A basic option focusing on building electronic circuits, reading and constructing wiring diagrams and schematics, writing a basic computer program in its BASIC language, and performing laboratory tasks such as wire stripping, splicing, and the removal and placement of components.

2. A Communications option encompassing the same activities as in the basic option, as well as trouble shooting, the design of electronic circuits under the supervision of an electronic engineer, the analysis of test results, and the relation and principles of logic to digital, microprocessor and communication systems.

3. A Microprocessor option along the same lines as the Communications option.

The AA degree in electronics technology would include the curriculum in the three certificate options, as well as instruction in mathematics, physics, computers, English and the social sciences.

The development of all of these options benefited from collective experience and support of an advisory committee made up of:

- an electronics technician instructor, Charles County VOTECH Center
- the Chairman, Department of Industrial Education and Technology, the University of Maryland, Eastern Shore
- an engineer from the McDonnell Douglas Corporation, Patuxent, Maryland
- a director of electronics operations and systems at Tracor, Inc., Wildewood, Maryland
- the station manager at Bendix Field Station, La Plata, Maryland
- the head of the Test and Instrumentation Department of the Calvert Cliff Nuclear Power Plant
- the head of Weapons System Simulation at the Naval Ordnance Station, Indian Head, Maryland, and
- a senior scientist at Bendix Field Engineering Corporation, St. Inigoes, Marvland

Two things are striking about this committee. First, the institutional mix is especially rich. Included are representatives from the local university where graduates may continue their education; local industrial entities with a real sense of what skills are needed and which kind of positions are likely to be open in the near future; and a major local employer (the Navy) likely to provide the single greatest source of students.

A second conspicuous feature of the committee is that it was composed of high-level personnel who could speak authoritatively.

A critically important part of the program proposal was to:

- assess potential student interest among full, part-time and new students;
- estimate the percentage of projected students who would obtain new employment as a result of their training;
- ascertain projected job openings in the college county as well as two adjacent counties (Prince George's and St. Mary's);
- project average annual salaries for program graduates; and
- list alternative fields of employment into which graduates may enter as job opportunities in the program area are unavailable.

In order to answer these and other questions, Charles County conducted a telephone and written survey of likely employers and consulted data generated by the Research and Analysis Division of the Maryland State Department of Employment and Training.

As shown in Appendix C, Electronics Technology Program Profiles, Charles County's program offerings are similiar to those at Prince Georges Community College, which was consulted during its development. Prince George's program, the second largest in Maryland, received the overall highest score in a 1979 publication,

"Where to Get Job Training In The D.C. Area." Criteria included items used to accredit various programs at each of the institutions:

- entrance requirements
- length of program
- when classes are held
- availability of part-time enrollment
- total costs
- average class size
- percent of students completing the program
- average starting salary of graduates
- student rating of instruction
- rating of facilities and equipment, and
- employer rating of overall program quality.

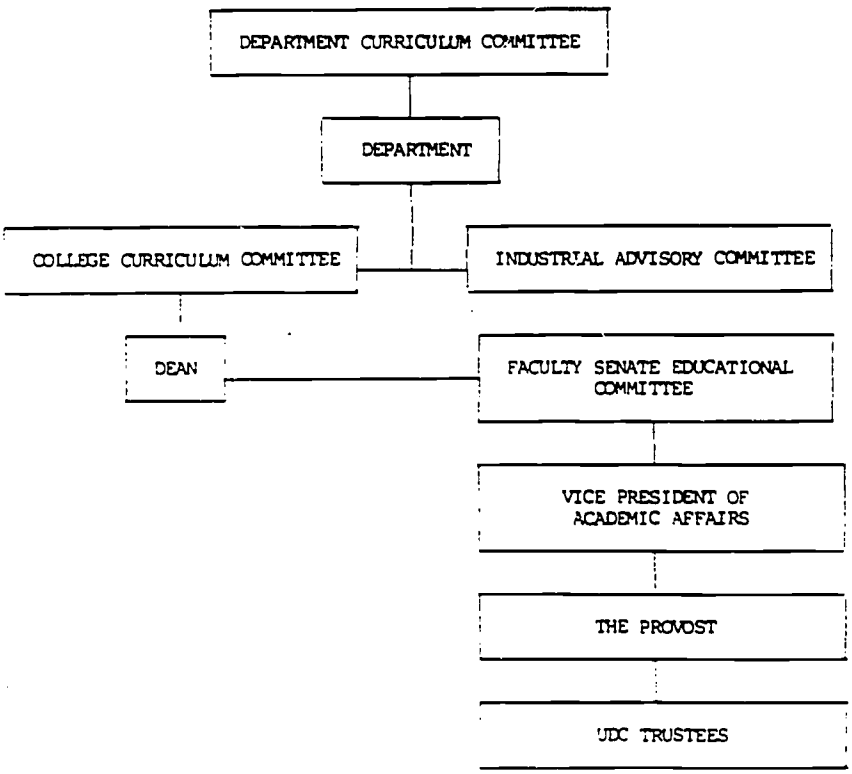
In each case, these issues were examined in developing the electronics technology programs and serve as major topics for in-house in evaluating program effectiveness.

INTEGRATION OF THE PROGRAM INTO THE CURRICULUM

In all four cases, it appears that the integration of a new, degree-granting program into the curriculum is a complex and time-consuming process taking a minimum of one year, and, more realistically, eighteen to twenty-four months.

Figure I, shows the path followed at UDC. At the Northern Virginia Community College, after a need for a new program is identified, a program proposal is compared to a systemwide curriculum plan. At the appropriate time it is reviewed by an advisory committee and then the proposed curriculum passes from a college curriculum committee to the college president to the appropriate state authorities.

FIGURE I
INTEGRATION OF A DEGREE-GRANTING
NEW PROGRAM INTO THE CURRICULUM
AT THE UNIVERSITY OF THE DISTRICT OF COLUMBIA



In each case, integrating a program into the curriculum is largely determined by institutional and governing bodies. A critical element, however, involves activities undertaken by individuals who serve as "prime movers" in generating interest, acquiring required documentation and coordinating the timely completion of requirements that may not be readily apparent or available. Most effective sources of information are obtained by diligent communications with institutional officals, colleagues, other program instructors, prospective employers and students. In many cases, "prime movers" are found among community college faculty. This group, which is discussed more fully in the following section, is key in providing support for program planning and implementation.

THE FACULTY

Recruiting highly qualified faculty in the electronics field is no easy task. Few employment areas offer as many rewards and incentives as electronics. The competition with the private sector for highly qualified personnel is consequently very stiff. This fundamental economic reality has created many challenges for community colleges.

In the case of UDC there is an additional challenge: by law, faculty are required to be residents of the District of Columbia, where real estate prices are so high as to make relocation for many a real impediment to accepting a position at the institution. Fortunately, the four programs under review have not suffered. For one thing, they have been characterized by a remarkable continuity. At UDC there has been no change at all in the full-time faculty over the past eight years. The head of the electronics technology program at Prince George's Community College has been teaching there for seventeen years; and a key faculty member at NOVA has been involved in the institution for over twenty years. The faculties at the four institutions have the same kind of opportunities for professional advancement one would expect to encounter at most community colleges:

- reduced teaching loads;
- travel funds to attend professional meetings and conferences;
- permission--indeed encouragement-to carry on consulting assignments; and
- some funds to support graduate studies.

None of this, however, can possibly account for one of the most striking conclusions to emerge from this study--that the four electronics technology programs are staffed by extraordinarily dedicated faculty. At UDC, for example, faculty members have actually donated time to design and install laboratory equipment. Other special projects are often performed during late evening hours and on holidays. In every single class setting we visited it was immediately apparent that the faculty member derived genuine enjoyment from teaching and that students were enthusiastically involved in activities that exceeded standard program requirements.

Dedicated and talented faculty are at the heart of all successful programs. In their absence, the best planning will not yield positive program results. Of course, there is no recipe for recruiting and retaining the kind of faculty found at these four colleges. Perhaps the only lesson to be drawn from the case studies, in this instance, is that nothing deserves more attention and care than assuring the stability of talented faculty.

THE STUDENTS

General characteristics of students participating in the four Electronics Technology Programs are presented in Appendix C. Many students similarities include:

- an average age of mid-twenties to early thirties;
- limited numbers of female program participants (approximately 10%);
- substantial numbers of both full-time and part-time students; and
- participation in both daytime and evening classes.

The racial characteristics of Electronics Technology Program participants tend to reflect those of the surrounding areas. For example, UDC has a high black student population, in contrast to high majority student populations at Charles County and the Northern Virginia campuses.

Student interviews yielded consistently similar responses with respect to program impressions and experiences. The majority of students indicated satisfaction with the program in fulfilling stated goals, availability and types of equipment, and accessibility to information and assistance in seeking employment.

Students were most enthusiastic in response to questions concerning instruction. As was discussed earlier, the dedication, commitment and assistance provided by individual instructors was repeatedly emphasized by the students.

An unexpected finding from student interviews concerns how students initially heard about the program. Friends or relatives were mentioned, rather than any formal program outreach effort. The need for more counseling to interest students in electronics technology was the primary student recommendation on how the program could be improved.

ARTICULATION AND OUTREACH

At the outset, the Charles County administration sought to develop three areas of program articulation;

1. Contact with the Charles County VOTECH graduates to enter the program and a commitment to pursue the same goal with VOTECH centers in St. Mary's and Calvert Counties.

2. Contact with the University of Maryland, Eastern Shore, to insure that the program would be articulated with the university's Electronics Technology Program for the BS degree for Capitol Tech College of Engineering Technology.

3. Investigation by members of the Advisory Board for cooperative arrangements with employers or the possibility of offering a technical practicum at company sites during the summer between the normal two years of study required in the program.

In other colleges the public information office has sponsored special workshops and distributed literature. Advisory Boards have publicized the program in industry, and faculty have visited high schools and arranged for students to come to campus.

As discussed in the previous section, however, these efforts have apparently yielded few results in attracting students. Without exception, students surveyed told us that they first heard about the electronics technology program from friends or found out about it because they were already enrolled at the institution taking other courses.

Outreach efforts and counseling to increase participation of students in technology-oriented training areas remain on-going program needs. Current efforts are most successful for students who have an expressed interest in various technologies. However, the projected increase in jobs requiring technical skills training should result in new strategies to attract additional student populations to evolving employment opportunities.

## CONCLUSIONS AND RECOMMENDATIONS

The four Electronics Technology Programs reviewed are, without doubt, highly successful in meeting local community education and job training needs. This became clear through the information provided by efficient program administrators, dedicated classroom/laboratory instructors and conscientous students in conducting the case studies.

Much of the data requested in the Study Plan was readily accessible at each site. Available, unpublished documentation includes reports on in-house program planning, periodic program evaluations and documentation for program certification. In addition, all of the groups interviewed showed interest, awareness and sensitivity to technology education and local job training issues.

A major need identified throughout the case studies was for mechanisms to support information sharing on a regular basis among vocational technical educators at community colleges. For example, instructors expressed interest in learning about specific courses, such as "Trouble-shooting," as well as the topics covered in an individual course. Although program administrators and instructors attend periodic meetings with their colleagues, these settings do not provide for consistent updating on specific program activities or instructional techniques. A widely circulated newsletter that featured successful program components at particular schools would be helpful to address the transfer and sharing of programmatic and technical information on a regular basis.

A greater need, however, involves enrolling increased numbers of students into technology-oriented job training programs. The community colleges reported outreach and articulation activities with secondary schools, other colleges, universities and local business entities. Yet, the students interviewed reported that friends or family members encouraged them to pursue training in a technical field. Clearly, more can be done to attract students to this type of training opportunity.

Minority youth who experience extremely high school dropout rates and low employment levels, should be specifically targeted to participate in a wide range of technology oriented job training programs. One America, Inc., therefore, recommends that the U.S. Department of Education sponsor a series of workshops to develop minority student outreach plans within local communities. The proposed workshops would target a specific technology program at a community college and involve vocational educators, counselors, community leaders and industry representatives in sharing ideas and developing outreach mechanisms. Workshop findings would be used to identify enrollment goals, required support mechanisms and industry incentives for enrolling minority youth in the targeted technology programs. Workshop results could be used to develop model outreach approaches that are widely disseminated to vocational educators.

Technology-oriented job preparation programs at community colleges provide the kind of technical training that will be needed for tomorrow's jobs. Perhaps the greatest challenge these programs face is to reach broader populations that can benefit from this much needed educational opportunity.

APPENDIX A

ABSTRACT

CASE STUDIES IN TECHNOLOGY-ORIENTED JOB PREPARATION


| | | | |
|---|---|---|---|
| CONTRACT NUMBER: | 300860009 | DURATION: | 1/16/86-6/15/86 |
| CONTRACTOR: | One America, Inc.<br>1109 Spring Street<br>Suite 300<br>Silver Spring, MD 20910 | PROJECT DIRECTOR:<br>TELEPHONE:<br>FUNDING AMOUNT: | Lois Taylor Holsey<br>(301) 588-2025<br>$39,994 |


BACKGROUND AND NEED

The U.S. Department of Education sponsored a study on the ability of educational institutions to structure their curricula in response to our emerging technological market place. One America, Inc., the contractor, uncovered voluminous literature on theoretical or prescriptive issues. Severely lacking, however, were current program descriptions that provided the kind of detail needed from which to draw replicable models. The study concluded that case study reviews were essential to obtain the type of documentation needed to build successful technology-oriented vocational education programs.

PURPOSE

One America, Inc., will complete a limited number of case studies to determine community college programs and practices being used to prepare vocational education students for entry into technology-oriented jobs. The purpose of these case studies is to recommend areas in which additional study, applied research and further development is needed.

ACTIVITIES

The case studies will include site visits to Northern Virginia Community College, Prince Georges (MD) Community College, Charles County (MD) Community College and the University of the District of Columbia. A Panel of Experts; including Directors of Vocational Education at the four community colleges, the Maryland State Director of Vocational Education and a representative from the American Association of Community and Junior Colleges; will be utilized to develop the study plan and to review project findings.

MAJOR DELIVERABLE

One America, Inc., will work with program directors of the community colleges to develop a technical assistance plan based on the findings of the case studies and analyses. A final report will be produced.

IMPACT

The final report will identify critical elements that are predictors of program success. The report will be made available to appropriate vocational educators at the Federal, State and local levels.

APPENDIX B

REVISED STUDY PLAN

CASE STUDIES IN TECHNOLOGY-ORIENTED JOB PREPARATION

INTRODUCTION

The following study questions reflect discussions held and recommendations made by Panel of Expert (POE) members during our initial POE meeting held on February 26, 1986. This productive meeting resulted in the overall recommendation that the study focus be significantly narrowed. The wide range of technology-oriented job preparation programs at the four community colleges would be difficult to adequately identify and assess within the given time and logistical constraints. It was recommended that the case studies be limited to electronic-related degree programs. This topic would allow for significant comparisons among the four community colleges and satisfy the essential goals of the project.

Data collected will be organized into a time-related theme around five major issues which intersect and influence one another at a number of junctures. The plan focuses on how programs are:

1. initially conceived
2. integrated into the curriculum
3. staffed and equipped
4. organized and taught
5. evaluated and changed over time

MAJOR STUDY QUESTIONS

By casting a wide net within each part of this continuum, we hope to capture the interplay of issues and the salient character of each program and institutional setting.

1. The Origins of Electronic-related Degree Programs

   - Where did the idea for this program originate?
   - What were the chief motivating forces?
   - What were the major obstacles?
   - In this initial stage, to what extent did the administration consult with

     - the private sector;
     - trade or professional associations;
     - economic development organizations;
     - state and federal officials;
     - students;
     - other educational institutions (including local high schools); and,
     - others.

2. The Integration of Electronic-related degree programs into the Curriculum

   - At your institution, what is the procedure or process for adopting new programs? Provide examples.
   - How do new programs fit into the existing curriculum?
   - Are difficulties experienced in adopting new programs?
   - Are possible outside funding resources identified? Provide examples.
   - What marketing strategies and other processes are used to support new course development, both at the outset and on a continuing basis?

3. Staff and Equipment Issues

- Are existing faculty utilized for new programs?
- What opportunities for professional upgrading are provided?
- Does cooperative education for faculty play a role in this program?
- How are faculty tied to industry?
- What special qualifications are sought in new faculty members?
- How are faculty recruited?
- How is the type of equipment needed for this program determined?
- Is this equipment purchased, leased, donated, loaned or purchased at cost?
- Characterize equipment in terms of its age and relation to the state-of-the-art.
- Are provisions made for periodic upgrading of equipment?
- Are students, faculty and private industry satisfied with the availability and quality of the equipment; and if not what suggestions have been presented?

4. Organization and Instruction

- How long has the course been offered?
- What are the stated goals for the course?
- Identify program enrollment efforts, including articulation with high schools and strategies to provide access.
- What are the prerequisites for this program?
- Is the program designed for entry-level training or retraining?
- How many students can be/are enrolled?
- How are students characterized including:

  - educational background;
  - age;
  - previous and subsequent work experience;
  - race;
  - sex; and,
  - full or part-time?

- How often does the class meet, including:

  - lecture;
  - laboratory or shop; and,
  - field trips?

- Is a degree offered in this program, and if so how many courses, and what combinations are required for the degree?

- Is this program offered at all campuses, and, if not, what arrangements are there for students to take courses at other campuses?

- Is there more than one instructor?

- How do administrators, instructors, counselors, students and employers feel about the course in terms of:

  - degree to which it fulfills stated goals;

  - depth of training;

  - responsiveness to changing economic circumstances and the needs of employers; and,

  - preparation for further training?

5. Evaluation and Change Over Time

   - Are there mechanisms in place for administrators, faculty, students and employers to evaluate -- and consult with one another about -- the course or program?

   - How are courses changed or updated?

   - Do administrators, faculty, students and employers feel that programs/courses are sufficiently responsive to the changing labor market; and, if not how could this be achieved?

STUDY METHODOLOGY

The following steps will be taken in addressing the earlier described questions.

1. Identify and examine available literature about all electronics-related degrees and programs in each institution.

2. Develop criteria to select four (4) courses within each institution to be examined in depth.

3. Conduct visits to the four courses.

4. Interview administrators and faculty.

5. Conduct telephone interviews with selected students and graduates.

6. Conduct telephone interviews with appropriate personnel in the private sector.

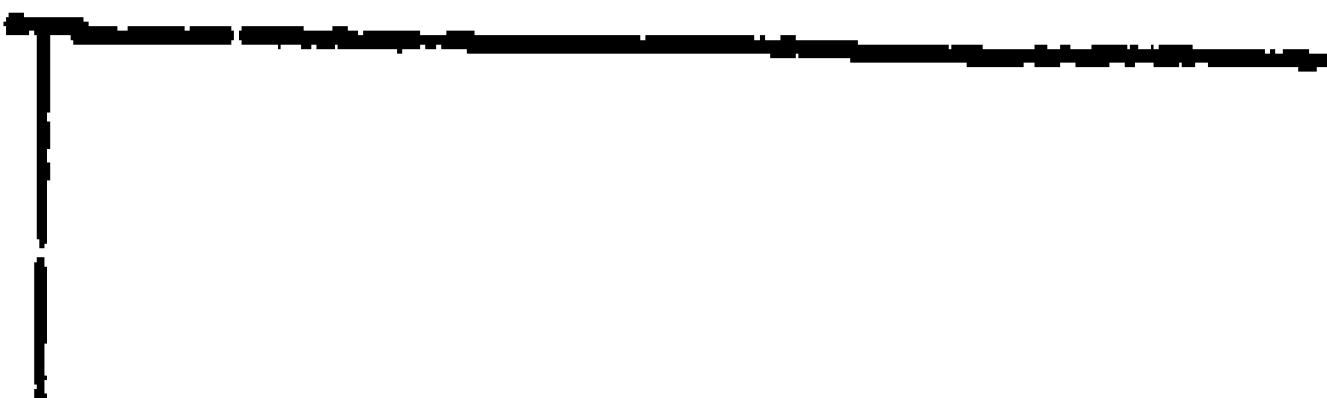
APPENDIX C

# PROGRAM

# FIRST YEAR COURSE REQUIREMENTS

# SECOND YEAR COURSE REQUIREMENTS

# CLASS LOCATIONS



APPENDIX D

# INSTITUTIONAL BACKGROUND

## Year Founded

| | CHARLES COUNTY | NORTHERN VIRGINIA | PRINCE GEORGES | UNIVERSITY OF |
|---|---|---|---|---|
| N<br>nued) | • To ensure equal opportunity for all students<br>• To attract & retain quality administrators, faculty & staff<br>• To reflect harmony, openess, and effective system of management<br>• To enrich the community with a variety of activities<br>• To assist in local economic development | . . . encompassing post-secondary occupational-technical education, college transfer education, general education, developmental instruction, continuing education, specialized training, community services, and cooperative education, complemented by a full program of student development services. | • To offer well developed community services program<br>• To develop learning strategies to meet needs of all students<br>• To maintain high standards in wide range of programs to meet the needs of a variety of students | • Counseling develop stu potential<br>• Offer compr sive progra studies<br>• Offer vocat and career development options<br>• Prepare pra tioners for leadership positions<br>• Offer credi non-credit seminars, f courses and institutes<br>• Encourage f student and community i<br>• Maintain co tive relati ships with schools, po secondary tions, indu business, g ment, varie resources r organizatio |

# ACCREDITATION

School